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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,527	05/09/2001	Serge Andre Rigori	5181-78400	6286

7590 04/15/2005

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EXAMINER
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SUAZO, RAINIER A

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/852,527	<b>Applicant(s)</b> RIGORI ET AL.	
	<b>Examiner</b> Rainier Suazo	<b>Art Unit</b> 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Claim 15 is canceled. Claims 1-14 and 16-24 remain pending in this application.

### Response to Arguments

Objections to claims 5-7, 2-17 and 22-24 under 37 CFR 175(c) are withdrawn as been overcome by Applicant's amendment. Regarding page 10 of Applicant remarks, Applicant refers to a set of claims 1-23, Examiner notes that such set of claims is effectively not the set of claims examined in the instant application. Moreover such set is not found in the instant application. Nevertheless, Examiner notes Applicant's opinion that the submitted amendments "to conform to claims 1-23" are sufficiently similar to the examined claims that prosecution is not materially affected. See paragraph 3 on page 10 of Applicant's remarks.

Rejections to claims 2, 3, 9 and 10 under 35 U.S.C. § 112 second paragraph are withdrawn as been overcome by Applicant's amendment.

Applicant's arguments regarding 35 U.S.C. § 103(a) rejections are found not persuasive. Examiner traverses all Applicants arguments in view of the following discussion.

In page 11 of Applicant's remarks, Applicant argues that teachings regarding

**"a control mechanism configured to respond to a request for a first service provided by a service module not present at the service gateway by sending one or more messages to an external source** until a response from the external source identifies a service module within the gateway that is capable of providing the first service."

are not found in the combination; and therefore a prima facie case of obviousness was not established. Examiner traverses such arguments. Chen et al. (Dynamic-Agents for Dynamic Service Provisioning) hereinafter 'Chen' teaches the claimed limitation. Chen explicitly teaches a control mechanism configured to **responsive to a request** (See the last two lines of page 5 and the first three lines in page 6); Chen messages are considered a request **for a first service**. Chen also taught a control mechanism configured to **respond to a request for a first service provided by a service module not present at the service gateway by sending one or more messages to an external source** until a response from the external source identifies a service module within the gateway that is capable of providing the first service (e.g. a problem-solving program, see pages 6 line 5) **provided by a service module** (dynamic-agents are interpreted by Examiner as service modules) **not present at the service gateway** (platforms are interpreted by Examiner as service gateways, see Fig. 4) **by sending one or more messages to an external source** (Chen's agents make request to agents in other ("external") platforms, which is interpreted by Examiner as "external source") until a response from the external source identifies a service module within the gateway that is capable of providing the first service (as pointed in Examiner's previous action (last 5 lines on page 3) Jacobson teaches conditional loop techniques).

Regarding arguments on paragraph 2 and 3 of page 12 of Applicant remarks, Examiner points out the following. Applicant seems to misinterpret Chen's disclosure as merely a "naming services for agents". Applicant is advised that Examiner's interpretation of Chen's disclosure is a system wherein agents (service modules) dynamically modify its behavior to satisfy requests (see page 6 line 5) received in messages upon determining that the agent does not know about the requested service (in this case a program) location and determining that the requested service is not present in the platform (gateway) (see page 7 paragraph 6 lines 6-11). Therefore the service of "naming services for agents" is part of Chen's disclosure as a whole and should not be interpreted as Chen's sole contribution to the art. Moreover regarding Applicant's argument that "the request from agents are not equivalent to requests "for a first service provided by a service module not present at the service gateway. Rather, the service already exist"; the Examiner notes that Applicant's services are "provided" and therefore already exist too, moreover if the service does not exist, with basic intelligence to locate components Chen's teaches that integration of systems components can be made on the fly to provide dynamic configuration of services (page 6 paragraph 5).

Regarding Applicant's arguments on page 13 that Chen does not teach "sending one or more messages to an external source"; Examiner traverses Applicant's opinion. Chen teaches that agents can be embodied in platforms and therefore requesting or

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messaging to an agent in a different platform constitutes messaging a request to an external source (external to the platform) (see fig. 4). Moreover the Applicant argues (page 12 paragraph 3) that agents only communicate within the agent domain, which is traversed by Examiner; Chen disclosed **inter-domain-agent messaging** on page 8 paragraph 3. Then, Chen explicitly taught sending one or more messages to an external source on page 8 paragraph 3. Applicant is advised to consider Chen's disclosure as a whole and not to limit the review of the prior art to what is pointed by Examiner.

Regarding Applicant's arguments in page 13 paragraph 5, the broadest interpretations of Applicants invention includes that the service module sends a message because the requested service is provided but not present at the services gateway; and therefore "is not currently supported" (see claim 1). In the same way Chen's disclosed agents are capable of providing the service but, since the service (class corresponding to the service) is not present, the agent request from another agent the address/location of a class corresponding to the service **and load the program** (see Chen page 7 paragraph 6, in particular line 9).

Applicant argues (page 13) that Chen does not teach, "accessing the record to determine ... if the first service module is not held by the service gateway". Examiner traverses Applicant's arguments. Chen describes the coordinator service and teaches that each agent keeps an address book (a record) of the addresses of agents known

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to it (See pages 4 paragraph 8).\_Further, in page 6 (section 3.3) Chen describes Dynamic Service Provisioning by providing an example that requires two workflow servers PM and WLM (dynamic-agents). Further in page 9 paragraph, Chen teaches that product-managers and plant managers can carry two servers (PM and WLM) and; that capabilities of such managers are determined by the loaded programs. Chen also described in figure 4 an Agents J and M (managers) embodied in platforms (service gateways). Having said that; Examiner understand that Chen disclosed a environment wherein two or more agents can co-exist in one single "platform" (service gateway), in that case one agent can determine (using its address book as a record or with the basic intelligence of its capabilities) if a service is available within itself or in the co-existing agent; and later accessing the coordinator if the service is not found within the platform. Therefore accessing a record (messaging the coordinator) if it is determined that a service module (agent containing the service) is not held by the service gateway (platform).

Based on the above discussion Applicant's arguments regarding 35 U.S.C. § 103(a) rejections are found not persuasive. Rejections under 35 U.S.C. 103 have been reviewed and updated according to Applicant's amendments and remarks.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 8-10 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (Dynamic-Agents for Dynamic Service Provisioning) hereinafter referenced to as Chen in view of Jacobson et al. (U.S. Patent Number 5,440,744) hereinafter referenced to as Jacobson and further in view of Bhatia et al. (U.S. Patent Number 6,029,203) hereinafter referenced to as Bhatia.

Regarding claim 1, 8, and 16-18, Chen taught an infrastructure including service gateways (platforms) being operable to hold (or support) at least one service module (dynamic-agent) for providing a corresponding service (fig. 4, page 4 paragraph 7 and page 5 paragraphs 3-5), wherein the service gateway comprises a control mechanism (page 5 paragraph 14 and page 6 paragraph 1) that is operable in response to a request for a service provided by a service module not present at the service gateway, to send one or more messages to an external source (page 5 paragraph 14 and page 6 paragraph 1)

Chen did not expressly teach details regarding one or more iterations until a response from the external service identifies a service module within the gateway that is capable of providing the first service (conditional loop).



Jacobson taught a well known in the art technique of a conditional loop and provided details regarding one or more iterations until a response from the external service identifies information including a service module held by the gateway that enables resolution of the absent service module(s) (column 28 lines 44-52).

Neither Chen nor Jacobson explicitly taught a service gateway for connecting at least one local client to an external network. However, Chen taught inter-domain-agent messaging (see page 8 paragraph 3) which motivate the exploration of the art of network communications (fig. 4); this teaching are broadly found in Jacobson, who further teaches communication with different nodes until a method server is started (Jacobson: column 28 lines 44-52).

Bhatia taught a service gateway for connecting at least one local client to an external network (Abstract, Fig.1 and 2a-c)

Chen taught that the execution of dynamic-agents agendas including conditional tasks which motivates the exploration of the art using such sort of conditional programming techniques (page 3 paragraph 13). Chen also taught motivation to implement the disclosed infrastructure in networked environments in different ways including: a) the mobility feature of the Dynamic-Agent Architecture that taught how an agent or an agent-factory can launch or cloned at a local or remote site (page 4 paragraph 4), b) the Resource-Broker implementation of a dynamic-agent which in

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many cases can be a coordinator registering socket addresses resolvable to TCP/IP addresses which is a protocol commonly used in the art to span wide area networks; the resource-broker also maps each program to its address, e.g. URL (Universal Resource Locator) which is also commonly used in the art to describe an address resolvable to a TCP/IP address (page 7 paragraph 6), c) an exemplary explanation of Extended Dynamic Service Provisioning with a product-manager dynamic-agent communicating with the Web Server, this communication typically use TCP/IP (section 5).

It would have been obvious to one of ordinary skill in the art working with Chen's disclosure at the time of the invention was made to modify the teachings of Chen with the teachings of Jacobson and Bhatia in order to send messages to an external source (Bhatia: Abstract, Fig.1 and 2a-c; and Chen: page 8 paragraph 3) and repeat such operation until a further condition occurs (Jacobson: column 28 lines 44-52), thus improving Chen's disclosure with a cyclic execution. Chen provided sufficient motivation and suggestions to explore the art of communicating with external sources (fig. 4 and page 8 paragraph 3) Chen also taught motivation to implement the disclosed infrastructure in networked environments in different ways including: a) the mobility feature of the Dynamic-Agent Architecture that taught how an agent or an agent-factory can launch or cloned at a local or remote site (page 4 paragraph 4), b) the Resource-Broker implementation of a dynamic-agent which in many cases can be a coordinator registering socket addresses resolvable to TCP/IP addresses which is a protocol commonly used in the art to span wide area networks; the resource-broker also maps

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each program to its address, e.g. URL (Universal Resource Locator) which is also commonly used in the art to describe an address resolvable to a TCP/IP address (page 7 paragraph 6), c) an exemplary explanation of Extended Dynamic Service Provisioning with a product-manager dynamic-agent communicating with the Web Server, this communication typically use TCP/IP (section 5). The combination of Chen with Bhatia and Jacobson would have resulted in a systems that explicitly teaches a control mechanism configured to **responsive to a request** (See the last two lines of page 5 and the first three lines in page 6); Chen messages are considered a request **for a first service**. Chen also taught a control mechanism configured to **respond to a request for a first service provided by a service module not present at the service gateway by sending one or more messages to an external source** until (Jacobson: column 28 lines 44-52) a response from the external source identifies a service module within the gateway that is capable of providing the first service (e.g. a problem-solving program, see pages 6 line 5) **provided by a service module** (dynamic-agents are interpreted by Examiner as service modules) **not present at the service gateway** (platforms are interpreted by Examiner as service gateways, see Fig. 4) **by sending one or more messages to an external source** (Chen's (fig. 4, page 8 paragraph 3, sections 3.2 and 3.3; and page 4 paragraph 6) agents make request to agents in other ("external") platforms, which is interpreted by Examiner as "external source") until a response from the external source identifies a service module within the gateway that is capable of providing the first service.

Regarding claim 2, 9 and 19, Chen taught a record of service modules held by the gateway including a reference to the service module (page 4 paragraph 7), the control mechanism being operable: to react to a request identifying a first service module by accessing the record to determine if the first service module is held by the service gateway and: using the associated pointer included on the record to cause the first service module to provide the corresponding service if the first service module is held by the service gateway; and requesting support from an external source by sending a message to the external source that includes an identification of the first service module if the first service module is not held by the service gateway; and to react to a response from the external source identifying a second service module by accessing the record to identify if the second service module is held by the service gateway using the associated pointer to cause the second service module to provide the corresponding service if the second service module is held by the service gateway; and requesting support from an external source by sending a message to the external source including the identity Of the second service module if the second service module is not held by the service gateway (page 4 paragraph 7-8, page 5 paragraph 14, page 6 paragraph 1 and sections 4 and 4.1).

Regarding claim 3, 10 and 20, Chen taught the control mechanism is operable to: react to a response from the external source that identifies a further service module by accessing the record to identify if the further service module is

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held by the service gateway and: using the associated pointer to cause the further service module to provide the corresponding service if the further service module is held by the service gateway; and requesting support from an external source by sending a message to the external source that includes the identification of the further service module if the further service module is not held by the service gateway (page 4 paragraph 7, page 5 paragraph 14, page 6 paragraph 1).

2. Claims 4-7, 11-14 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (Dynamic-Agents for Dynamic Service Provisioning) hereinafter referenced to as Chen in view of Jacobson et al. (U.S. Patent Number 5,440,744) hereinafter referenced to as Jacobson and further in view of Bhatia et al. (U.S. Patent Number 6,029,203) hereinafter referenced to as Bhatia and further in view of Marsh et al. (U.S. Patent Number 5,519,381) hereinafter referenced to as Marsh.

Regarding claims 4, 11 and 21, interpreted to be dependent on claim 1, 8 and 18 respectively, neither Chen, Jacobson, nor Bhatia explicitly taught the control mechanism operable to compare successive responses from an external source to identify response duplication indicative of a recursive error.

Marsh taught the control mechanism operable to compare successive responses from an external source to identify response duplication (column 2 lines 21-24)

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Chen taught a request-broker useful for redundant server (page 7 paragraph 11), flexible communication features (page 5 paragraphs 7-9) and automatic management of communications issues (page 6 paragraph 1) that suggest and motivates the exploration and application of the art elements to detect and manage communication errors.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to further combine the teachings of Chen modified by the teachings of Jacobson and Bhatia with the teachings of Marsh, motivated by Chen to explore the art of automatic management of communication issues (Chen: page 6 paragraph 1). The combination of Chen modified with Jacobson and Bhatia would have resulted improved with the teachings of Marsh by adding automatic management of communications issues that specifically compare responses from an external source to identify response duplication (Marsh; column 2 lines 21-24).

Regarding claims 5, 12 and 22, Chen further taught a control mechanism reacting to the identification of a service module and from an external source by supplying data to the module now held by the service gateway, for processing by the module (see Chen page 7 paragraph 6, in particular line 9).

Regarding claims 6-7, 13-14 and 23-24, Chen further taught requesting services from a service provider and the use of operators (Fig. 3, page 2 paragraph 8 and page 7 paragraphs 7-11).

3. Claims 1-3, 8-10 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (Dynamic-Agents for Dynamic Service Provisioning) hereinafter referenced to as Chen in view of Howard et al. (U.S. Patent Number 6,601,086) hereinafter referenced to as Howard.

Regarding claim 1, 8 and 16-18, Chen taught a service gateway operable for connecting at least one local client to an external network and hold at least one service module for providing a corresponding service, wherein the service gateway includes a control mechanism configured to respond to a request for a first service provided by a service module not present at the service gateway by sending one or more messages to an external source to identify a service module within the gateway that is capable of providing the first service after downloading the program that provides the service and executing such program (page 4 paragraph 7 and 8, fig. 4, page 4 paragraph 7 and page 5 paragraphs 3-5, page 5 paragraph 14 and page 6 paragraph 1).

Chen did not expressly teach details regarding one or more iterations until a response from the external service identifies a service module within the gateway that is capable of providing the first service (conditional loop).

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Howard, in the same field of endeavor related to service provisioning, taught a service provider wherein, as defined in claims **1, 2 and 12**, the service provider communicates with the information providers via the computer network and provides data to the plurality of embedded devices such that the embedded devices do not communicate directly with the providers and further comprising an information collection manager for searching the computer network and accessing and obtaining updated service information from the computer network, wherein the provider updates computer program code on an embedded device by obtaining updated computer program code via the computer network and by notifying the embedded device of an available update and by further sending the updated computer program code to the embedded device (fig. 7 and 9-11, column 6 lines 18-36, column 9 line 56 to column 11 line 18 and column 16 lines 3-65). In column 16 lines 54-65, Howard taught an arrangement wherein requestors ask a service provider to monitor and/or control one or more embedded devices and the service provider may obtain data or software updates that may be needed by the embedded devices, all of such functions interpreted by Examiner as services provided by the service provider to requestors and embedded devices.

**More specifically Howard taught a loop in a data communication process (fig. 12 and column 16 line 54 to column 17 line 59).**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Chen with the teachings of Howard to add the functionality of querying external source in a cyclic manner (Howard: fig. 12 and column



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16 line 54 to column 17 line 59) for identifying further services to Chen's dynamic agent infrastructure thus expanding the possible amount of services provided. Chen taught sufficiently interoperability functionalities of dynamic-agents to motivate anyone with ordinary skill in the art to use such functionality to identify additional applications such as searching for additional classes (page 3 paragraph 13, page 4 paragraphs 3 and 4, page 5 paragraph 14, page 6 paragraph 1 and page 7 paragraph 1). Howard also taught motivations to obtain updates from external sources to provided additional information that may be useful for the embedded device or the service provider (column 6 lines 18-36). Therefore, the combination teaches a control mechanism configured to **responsive to a request** (Chen: last two lines of page 5 and the first three lines in page 6); Chen messages are considered a request **for a first service**. Chen also taught a control mechanism configured to **respond to a request for a first service provided by a service module not present at the service gateway by sending one or more messages to an external source** until (Howard: "Loop in data communication" described in fig. 12) a response from the external source identifies a service module within the gateway that is capable of providing the first service (e.g. a problem-solving program, see pages 6 line 5) **provided by a service module** (dynamic-agents are interpreted by Examiner as service modules) **not present at the service gateway** (platforms are interpreted by Examiner as service gateways, see Fig. 4) **by sending one or more messages to an external source** (Chen's agents make request to agents in other ("external") platforms, which is interpreted by Examiner as "external source") until (Howard: "Loop in data communication" described in fig. 12 and

column 16 line 54 to column 17 line 59) a response from the external source identifies a service module within the gateway that is capable of providing the first service (Chen: page 6 paragraph 1, fig. 4, page 8 paragraph 3, sections 3.2, 3.3 and 5; and page 4 paragraph 6).

Regarding claim 2, 9 and 19, Chen further taught a record of service modules held by the gateway including a reference to the service module (page 4 paragraph 7), the control mechanism being operable: to react to a request identifying a first service module by accessing the record to determine if the first service module is held by the service gateway and: using the associated pointer included on the record ("...address-book, recording the addresses..." [page 4 paragraph 7] and capabilities details provided on page 9 paragraph 1) to cause the first service module to provide the corresponding service if the first service module is held by the service gateway (page 4 paragraph 7) [Examiner interprets that Chen agents would only contact the coordinator if the request can not be satisfied with the agent's known self capabilities or the agent's address-book]; and requesting support from an external source by sending a message to the external source that includes an identification of the first service module if the first service module is not held by the service gateway (page 5 [last 10 lines, page 6 [first 9 lines], section 4 ["Cooperation among Dynamic-Agents] and page 8 paragraph 3); and to react to a response from the external source identifying a second service module (second agent) by accessing the record (address-book updated with newly received information or updated known self capabilities or consulting the coordinator) to identify if

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the second service module is held by the service gateway using the associated pointer (obtained address) to cause the second service module to provide the corresponding service if the second service module is held by the service gateway (See page 5 paragraph 2, **“An action running on a dynamic-agent, A, can send messages through A to other dynamic-agents to enable actions over there or use either APIs or messages to start other actions locally on A”**); and requesting support from an external source by sending a message to the external source including the identity Of the second service module if the second service module is not held by the service gateway (page 4 paragraph 7-8, page 5 paragraph 14, page 6 paragraph 1 and sections 4 and 4.1). Furthermore,

- Chen describes the coordinator service and teaches that each agent keeps an address book (a record) of the addresses of agents known to it (See page 4 paragraph 8).
- Further, in page 6 (section 3.3) Chen describes Dynamic Service Provisioning by providing an example that requires two workflow servers PM and WLM; each of which is a dynamic-agent.
- Further in page 9 paragraph 1, Chen teaches that product-managers and plant managers can carry two servers (PM and WLM) and; that capabilities of such managers are determined by the loaded programs.
- Chen also described in figure 4 an Agents J and M (managers) embodied in platforms (service gateways).

Having said that; it is clear that Chen disclosed a environment wherein two or more agents can co-exist in one single "platform" (service gateway), in that case one agent can determine (using its address book as a record or with the basic intelligence of its capabilities) if a service is available within itself or in the co-existing agent (second service module); and later accessing the coordinator if the service is not found within the platform. Therefore accessing a record (messaging the coordinator) if it is determined that a service module (agent containing the service) is not held by the service gateway (platform).

Regarding claim 3, 10 and 20, Chen further taught the control mechanism is operable to: react to a response from the external source that identifies a further service module by accessing the record to identify if the further service module is held by the service gateway and: using the associated pointer included in the record to cause the further service module to provide the corresponding service if the further service module is held by the service gateway (platform); and requesting support from an external source by sending a message to the external source that includes the identification of the further service module if the further service module is not held by the service gateway (page 4 paragraph 7, page 5 paragraph 14, page 6 paragraph 1).

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rainier Suazo whose telephone number is (571) 272-3931. The examiner can normally be reached on Monday through Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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